Docket No.: TDT-ADV-006 (TJU-2441) Serial No. 09/820,215 PATENT Filed: March 27, 2001

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please amend claim 3.

Please cancel claim 2.

STATUS OF CLAIMS

- 1. (currently amended) A method of detecting the presence of a disseminated epithelial cell marker in a sample comprising the steps of
 - a) eliminating CD34+ cells from the sample; and
 - b) detecting the presence of mRNA that encodes the marker; wherein the marker is a differentiation specific antigen;

wherein said detection of said mRNA indicates the presence of a disseminated epithelial cell marker.

- 2. (canceled)
- 3. (Currently Amended) The method of claim 1 2, wherein the tissue is selected from the group consisting of colon, lung, prostate, testis, breast, liver, and skin.
- 4. (Previously Presented) The method of claim 1, wherein the disseminated epithelial cell marker is selected from the group consisting of guanylyl cyclase C, Cdx-1, Cdx-1, Cdx-2, sucrase isomaltase, lactase, carbonic anhydrase, prostate specific antigen, prostate specific membrane antigen, cytokeratin 18, cytokeratin 19, cytokeratin 20, ErbB2, Erb-B3, epithelial mucin-1, epithelial mucin-18, gastrointestinal tumor associated antigen 733.2, desmoplakin I, epithelial glycoprotein 40, tyrosinase, thyroglobulin, tyrosine hydroxylase, and neuron-specific glycoprotein.
- (Canceled)

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- (Previously Presented) The method of claim 1, wherein the CD34+ cells are 6. removed by column chromatography.
- (Original) The method of claim 1, wherein the sample is tissue or bodily fluid. 7.
- (Original) The method of claim 1, wherein the sample is selected from the group 8. consisting of blood, lymph tissue, and bone marrow.
- (Original) The method of claim 1, wherein the mRNA is detected a polymerase 9. chain reaction (PCR)-based method.
- (Original) The method of claim 1, wherein the mRNA is detected by reverse 10. transcriptase (RT)-PCR.
- (Original) The method of claim 1, wherein the mRNA is detected by nested RT-11. PCR.

Claim 12. Canceled

- (Previously Presented) The method of claim 1, wherein the marker is selected 13. from the group consisting of guanylyl cyclase-C (GC-C), prostate-specific antigen (PSA), prostate-specific membrane antigen (PSM), cytokeratin-19 (CK-19), cytokeratin-20 (CK-20), mucin 1 (MUC-1), and gastrointestinal-associated antigen (GA733.2).
- (Original) The method of claim 1, wherein the marker is GC-C. 14.
- (Previously Presented) The method of claim 1, wherein the disseminated 15. epithelial cell marker is a cell marker for a metastatic colon cancer cell.

Claims 16-36 (Canceled)

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- (Previously Presented) The method of claim 1 wherein the sample is mononuclear 37. cells isolated from blood.
- (Previously Presented) The method of claim 37, wherein the disseminated 38. epithelial cell marker is a tissue-specific marker.
- (Previously Presented) The method of claim 38, wherein the tissue is selected 39. from the group consisting of colon, lung, prostate, testis, breast, liver, and skin.
- (Previously Presented) The method of claim 37, wherein the disseminated 40. epithelial cell marker is selected from the group consisting of guanylyl cyclase C, Cdx-1, Cdx-1, Cdx-2, sucrase isomaltase, lactase, carbonic anhydrase, prostate specific antigen, prostate specific membrane antigen, cytokeratin 18, cytokeratin 19, cytokeratin 20, ErbB2, Erb-B3, epithelial mucin-1, epithelial mucin-18, gastrointestinal tumor associated antigen 733.2, desmoplakin I, epithelial glycoprotein 40, tyrosinase, thyroglobulin, tyrosine hydroxylase, and neuron-specific glycoprotein.
- (Previously Presented) The method of claim 37, wherein the CD34+ cells are 41. removed by column chromatography.
- (Previously Presented) The method of claim 37, wherein the mRNA is detected a 42. polymerase chain reaction (PCR)-based method.
- (Previously Presented) The method of claim 37, wherein the mRNA is detected 43. by reverse transcriptase (RT)-PCR.
- (Previously Presented) The method of claim 37, wherein the mRNA is detected 44. by nested RT-PCR.
- (Previously Presented) The method of claim 37, wherein the marker is selected 45. from the group consisting of guanylyl cyclase-C (GC-C), prostate-specific antigen (PSA),

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prostate-specific membrane antigen (PSM), cytokeratin-19 (CK-19), cytokeratin-20 (CK-20), mucin 1 (MUC-1), and gastrointestinal-associated antigen (GA733.2).

- (Previously Presented) The method of claim 37, wherein the marker is GC-C. 46.
- (Previously Presented) The method of claim 37, wherein the disseminated cell 47. cell. colon cancer metastatic for marker cell marker is